What is claimed is:

| 1 | 1. | In a communication system having a first predefined maximum system |
|----|--------|--|
| 2 | transr | mission power level for in-band transmissions, a method in a first communication |
| 3 | devic | e comprising: |
| 4 | | determining that communication performance between a first communication |
| 5 | | device and a second communication device exceeds a performance threshold; |
| 6 | | based on the determination, assigning a first band-edge channel for |
| 7 | | communication between the first communication device and the second |
| 8 | | communication device; and |
| 9 | | the first communication device transmitting a first signal for reception by the |
| 10 | | second device via the first band-edge channel, the first signal transmitted at a |
| 1 | | reduced power level that is below the first predefined maximum system |
| 12 | | transmission power level. |
| 1 | 2. | The method of claim 1, further comprising: |
| 2 | | the first communication device receiving a second signal transmitted by the |
| 3 | | second communication device, the second signal transmitted at or below the |
| 4 | | reduced power level. |
| | | |
| 1 | 3. | The method of claim 2, further comprising: |
| 2 | | the first communication device receiving the second signal via the first band-edge |
| 3 | | channel |

| 1 | 4. | The method of claim 2, further comprising: |
|---|----|---|
| 2 | | the first communication device receiving the second signal via a second band- |
| 3 | | edge channel. |
| 1 | 5. | The method of claim 2, further comprising: |
| 2 | | the first communication device transmitting an indication to the second |
| 3 | | communication device indicating a maximum transmission power level to be |
| 4 | | used by the second device. |
| 1 | 6. | The method of claim 1, further comprising: |
| 2 | | providing a power control mechanism for assigning a temporary assigned power |
| 3 | | level for transmitting the first signal, the temporary assigned power level |
| 4 | | being less than the reduced power level. |
| 1 | 7. | The method of claim 6 further comprising: |
| 2 | | determining a minimum level of communication performance for transmitting the |
| 3 | | first signal; and |
| 4 | | selecting, based on determining the minimum level of performance, the temporary |
| 5 | | assigned power level. |
| 6 | | |
| 1 | 8. | The method of claim 2, further comprising: |

| 2 | | providing a power control mechanism for assigning a temporary assigned power | |
|---|--|---|--|
| 3 | | level for transmitting the second signal, the temporary assigned power level | |
| 4 | | being less than the reduced power level. | |
| | | | |
| 1 | 9. | The method of claim 8 further comprising: | |
| 2 | | determining a minimum level of communication performance for transmitting the | |
| 3 | | second signal; and | |
| 4 | | selecting, based on determining the minimum level of performance, the temporary | |
| 5 | | assigned power level. | |
| | | | |
| 1 | 10. | The method of claim 1, wherein communication performance is determined based | |
| 2 | on a metric selected from the group consisting of signal-to-noise ration (SNR), signal-to- | | |
| 3 | interference-noise ration (SINR), received signal strength indication (RSSI), bit error rate | | |
| 4 | (BER), and frame error rate (FER). | | |
| 5 | | | |
| 1 | 1 1 | | |
| 1 | 11. | The method of claim 7, wherein communication performance is determined based | |
| 2 | on a metric selected from the group consisting of signal-to-noise ration (SNR), signal-to- | | |
| 3 | interference-noise ration (SINR), received signal strength indication (RSSI), bit error rate | | |
| 4 | (BER) | , and frame error rate (FER). | |
| 1 | 10 | | |
| 1 | 12. | The method of claim 1, further comprising: | |
| 2 | | after transmitting the first signal, determining that interference affecting | |
| 3 | | communication between the first and second communication devices is above | |
| 4 | | a threshold; and | |

| 5 | | increasing the amount of power used to transmit from the first communication |
|---|--------|--|
| 6 | | device. |
| 7 | | |
| 1 | 13. | The method of claim 2, further comprising: |
| 2 | | after receiving the second signal, determining that interference affecting |
| 3 | | communication between the first and second communication devices is above |
| 4 | | a threshold; and |
| 5 | | increasing the amount of power used to transmit from the second communication |
| 6 | | device. |
| 1 | 14. | The method of claim 1 further comprising: |
| 2 | | providing the first predefined maximum system transmission power level for in- |
| 3 | | band transmissions from the first communication device to the second |
| 4 | | communication device; |
| 5 | | providing a second predefined maximum system transmission power level for in- |
| 6 | | band transmissions from the second communication device to the first |
| 7 | | communication device; and |
| 8 | | causing the second communication device to transmit below the second |
| 9 | | predefined maximum system transmission power level. |
| 0 | | |
| 1 | 15. | The method of claim 14, wherein the first communication device comprises a |
| 2 | hase s | station and the second communication device comprises a terminal |

| 1 | 16. | The method of claim 14, wherein the first and second predefined maximum | |
|---|--------------------------------------|--|--|
| 2 | transmission power levels are equal. | | |
| 3 | | | |
| 1 | 17. | The method of claim 14, wherein the first and second predefined maximum | |
| 2 | transı | mission power levels are unequal. | |
| 1 | 18. | In a communication system, a method comprising the acts of: | |
| 2 | | providing a first set of one or more channels for in-band transmissions; | |
| 3 | | providing a second set of one of or more channels for in-band transmissions, the | |
| 4 | | second set of channels in closer proximity to a band edge than the first set of | |
| 5 | | channels; and | |
| 6 | | transmitting within the second set of channels at a first power level that is less | |
| 7 | | than a second power level used for transmitting within the first set of | |
| 8 | | channels. | |
| 1 | 19. | The method of claim 18, further comprising the act of: | |
| 2 | | determining that communication performance of a first device is above that of a | |
| 3 | | second device; and | |
| 4 | | based on the determination, assigning the first device to the first set of channels; | |
| 5 | | and | |
| 6 | | assigning the second communication device to the second set of channels. | |
| 7 | | | |